



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,822	06/27/2003	Toshiyuki Hosaka	9319S-000519	7981
27572	7590	03/25/2005	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			ALAVI, ALI	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/608,822	<b>Applicant(s)</b> HOSAKA, TOSHIYUKI	
	<b>Examiner</b> Ali Alavi	<b>Art Unit</b> 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8,10 and 11 is/are rejected.
- 7) ☒ Claim(s) 3 and 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/03/04</u> . | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 5, 7-8, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by ITO et al (JP Pat. 09-159985) furnished by Applicant.

Regarding claims 1 and 7, the applicant is advised that claims have been given their broadest reasonable interpretation. In re Pearson, 181 USPQ 641 (CCPA 1974).

Ito discloses a display (100) comprising: a light source (50), light dividing means (bundle 52) for dividing light emitted by the light source, and a plurality of modulation means (20) which modulates the divided light to incident light capable of displaying an image and projects the incident light to a screen to display the image (1).

Regarding claim 5, Ito further teaches that the light dividing means includes a plurality of optical fibers capable (53) of guiding the light emitted by the light source to the respective modulation means.

Art Unit: 2875

Regarding claim 8, Ito further discloses that the at least part of said light to each of said plurality of modulators (since light distributed by the light fibers thus part of the light is transmitted to each modulator).

Regarding claim 11, Ito further discloses that the light directing means further comprises a plurality of optical fibers (53) disposed between said light source and each of said plurality of modulators.

Claims 1, 6, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Deter (JP Pat. 2000-214529) in which furnished by Applicant.

Regarding claims 1, and 7, the applicant is advised that claims have been given their broadest reasonable interpretation. In re Pearson, 181 USPQ 641 (CCPA 1974).

Deter discloses a display (101) comprising: a light source (100), light dividing means (111) for dividing light emitted by the light source, and a plurality of modulation means (25, 26, and 27) which modulates the divided light to incident light capable of displaying an image and projects the incident light to a screen to display the image (A, B, and C).

Regarding claim 6, Deter further discloses a game machine system (video, abstract).

Claims 1, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Tabata (JP Pat. 2002-214707) in which furnished by Applicant.

Regarding claims 1, and 7, the applicant is advised that claims have been given their broadest reasonable interpretation. In re Pearson, 181 USPQ 641 (CCPA 1974).

Tabata discloses a display comprising: a light source (1), light dividing means (34) for dividing light emitted by the light source, and a plurality of modulation means (5) which modulates the divided light to incident light capable of displaying an image and projects the incident light to a screen to display the image (1).

Claims 1-2, 4, and 7-8, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Takahara et al (US Pat. No 6,049,364).

Regarding claims 1, and 7, the applicant is advised that claims have been given their broadest reasonable interpretation. In re Pearson, 181 USPQ 641 (CCPA 1974).

Takahara discloses a display comprising: a light source (241a, fig. 24), light dividing means (241c) for dividing light emitted by the light source, and a plurality of modulation means (243a, 243b, 243c) which modulates the divided light to incident light capable of displaying an image and projects the incident light to a screen to display the image (col. 16, lines 37-53, fig. 24).

Regarding claim 2, Takahara further discloses a plurality of reflectors (242a-242c, fig. 24) corresponding to the light dividing means (241C) respective modulation means, wherein the reflectors are arranged on the optical path of the light emitted by the light source to reflect the emitted light respectively toward the corresponding modulation means.

Regarding claim 4, Takahara further discloses the light dividing means includes a plurality of prisms arranged corresponding to the respective modulation means, the prisms being arranged on the optical path of the light emitted by the light source to change the optical path of the emitted light toward the modulation means (fig. 24).

Regarding claim 8, Takahara further that the light directing means for directing at least part of said light to each of said plurality of modulators (242a-242c, fig. 24).

Regarding claim 10, Takahara further discloses that said light directing means further comprises, a plurality of prisms sequentially positioned along an optical path of said light (fig. 24).

### ***Allowable Subject Matter***

Claims 3, and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 3 is objected to because in part recites "... wherein each of the reflectors is an integrated unit including a reflecting section for reflecting part of the emitted light toward the corresponding modulation means and a transmitting section for passing another part of the emitted light through other reflectors arranged apart from the light source." This feature was not taught or suggested by the prior art of record. Claim 9 is objected to because in part recites "... wherein said light directing means further comprises: a plurality of light reflectors sequentially positioned along an optical path of said light, at least an upstream one of said plurality of light reflectors being partially transmissive." This feature was not taught or suggested by the prior art of record.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hiroki et al (US Pat. No 5,767,924) discloses a display unit

Art Unit: 2875

including a light source 101, light divider 102, a plurality of reflectors, and light modulators (110-112).

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Ali Alavi whose telephone number is (571) 272-2365. The examiner can normally be reached between 7:00 A.M. to 5:30 P.M. Tuesday to Friday. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Sandy O'Shea can be reached at (571) 272-2378 or you may fax your inquiry to the **Central Fax** at (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ali Alavi  
Examiner  
AU 2875